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Attorney Docket 1207-005

Examiner: G. Kartchner

Group Art Unit:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JULIO C. PALMAZ

Serial No.: 923,798

Filed: November 3, 1986

For: EXPANDABLE INTRALUMINAL

GRAFT, AND METHOD AND)
APPARATUS FOR IMPLANT-)
ING AN EXPANDABLE INTRA-)

LUMINAL GRAFT

SECOND SUPPLEMENTAL STATEMENT UNDER RULE 1.97

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Dear Sir:

The following lists of patents and other material set forth in the enclosed P.T.O. form 1449 were considered after preparation of the above-identified application. A brief description of the relevance of these patents and materials follows which may aid the Examiner in the examination of this application. Copies of the patents and other materials hereinafter discussed are attached hereto for the Examiner's convenience.

The article entitled "Flexible Balloon-expanded Stent for Small Vessels" discloses a stent which wis balloon-expanded. It is formed of surgical suture wire wrapped cylindrically, with bends adopting a sequential U and inverted U configuration every 360 degrees. Appended to the article are two drawings which were not part of the article, but are believed to illustrative of the stent disclosed in the article. It is believed that the stent

disclosed in this article was developed sometime after Applicant's invention of his graft. The graft of Applicant is referred to in reference 4 of this article.

U.S. Patent No. 4,560,374, to Hammerslag discloses a synthetic liner which is inserted into a blood vessel. Hammerslag states that the liner is selected from an "insert plastic having substantially the same elasticity as the He further states that the artery is human artery." slightly tapered so as to closely match the natural tapering of the arterial passages. In column 2, 11. 5-10, he implies that the liner, or sleeve, will expand and contract along with the artery since he uses a material having "the same or substantially the same elasticity of the artery." His liner is delivered via use of a balloon catheter. Applicant would question the operability of the Hammerslag device disclosed, in that it would appear that after the liner has been expanded, deflation of the balloon would permit the liner to assume its initial unexpanded configuration due to the elasticity of the liner. Applicant would further submit that this patent does not disclose controlled expansion, as claimed in Applicant's claims.

- U.S. Patent No. 3,774,596, to Cook discloses a device for the inspection of body cavitities.
- U.S. Patent No. 4,140,126, to Choudhury discloses a prosthetic graft which is anchored by a plurality of anchoring pins.

- U.S. Patent No. 4,141,364, to Schultze discloses an endotracheal tube which is provided with an expandable cuff.
 - U.S. Patent No. 4,577,631, to Kreamer discloses a prosthetic graft inserted into a vessel around a balloon catheter, the graft being coated with a contact adhesive which adheres to the body passageway wall.
 - U.S. Patent No. 4,562,596, to Kornberg discloses an aortic graft which includes a plurality of struts having barbs at their ends for attaching the graft..
 - U.S. Patent No. 3,868,956, to Alfidi, et al discloses an expansible appliance implanted within a body vessel through a catheter.
 - U.S. Patent No. 4,425,908, to Simon discloses a blood clot filter which is collapsed, and upon insertion into a vein automatically, radially expands into a predetermined form.
 - U.S. Patent No. 4,512,338, to Balko, et al discloses a process for restoring the patency of vessels wherein a wire alloy coil having shape memory characteristics is utilized.
 - U.S. Patent No. 4,553,545, to Maass, et al discloses a helically shaped spiral spring stent, which is collapsed and inserted into a vessel. Thereafter, the spring stent is uncoiled to expand within the vessel.

- U.S. Patent No. 4,580,568, to Gianturco discloses a stent of wire arranged in a closed zig-zag pattern.
- U.S. Patent No. 4,299,226, to Banks discloses a coronary dilation method utilizing a catheter.
- U.S. Patent No. 4,416,028, to Eriksson, et al discloses a blood vessel prosthesis having a resorbable material on the inside of the tubular element forming the prosthesis.
- U.S. Patent No. 4,483,339, to Gillis discloses a vascular surgery roll.
- U.S. Patent No. 4,564,014, to Fogerty, et al discloses a dilation catheter.
- U.S. Patent No. 4,318,410, to Chin discloses a double lumen dilation catheter.

Respectfully submitted,

Ben/D.

Reg. No. 27,760

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Date: